

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization International Bureau



(43) International Publication Date
31 March 2005 (31.03.2005)

PCT

(10) International Publication Number
WO 2005/027944 A1

(51) International Patent Classification⁷: A61K 35/78, A61P 39/06, 29/00, A23L 1/30

(21) International Application Number:

PCT/CA2004/001724

(22) International Filing Date:

22 September 2004 (22.09.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/503,881 22 September 2003 (22.09.2003) US

(71) Applicant (for all designated States except US): PURE-CELL TECHNOLOGIES INC. [CA/CA]; 4925, Lionel-Groulx, bureau 21, St-Augustin-de-Desmaures, Quebec G3A 1V1 (CA).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PURCELL, Marc [CA/CA]; 4538c de la Futaie, Saint-Augustin-de-Desmaures, Quebec G3A 1C7 (CA). DROUIN, Réjean [CA/CA]; 1690 rue Principale, St-Gilles de Lotbinière, Quebec G0S 2P0 (CA).

(74) Agents: DUBUC, J. et al.; Goudreau Gage Dubuc, Stock Exchanges Tower, Suite 3400, 800 Place Victoria, P.O. Box 242, Montreal, Quebec H4Z 1E9 (CA).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

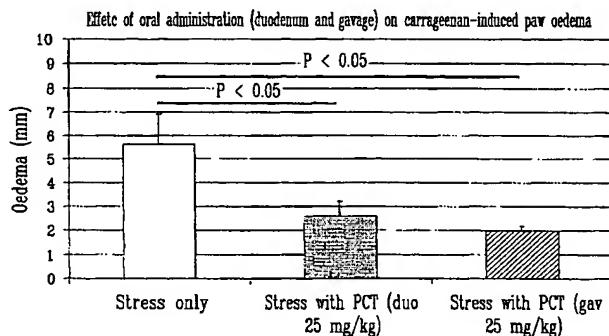
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— with international search report

[Continued on next page]

(54) Title: ORAL COMPOSITIONS AND ROUTE OF ADMINISTRATION FOR THE DELIVERY OF A THYLAKOID EXTRACT



(57) Abstract: The present invention provides a new use or method of use of a thylakoid extract, for oral route of administration, and a composition comprising the thylakoid extract in adjunction with an acceptable carrier for oral administration. Besides the pharmaceutical use, the thylakoid extract enters the composition of food or food supplements, or medication for its innocuity and its capacity to provide a diet enriched in anti-oxidants and anti-inflammatory compounds. Therefore, in accordance with the present invention is provided the use of thylakoid extract in the making of an oral composition for treating preventing a disease or disorder involving the formation of reactive oxygen species or inflammation. Also is provided a method for treating or preventing a disease or disorder involving the formation of reactive oxygen species inflammation in an individual, which comprises the step of orally administering an effective dose of a thylakoid extract. Further is provided an oral composition comprising a thylakoid extract and a vehicle for oral ingestion or oral administration. An oral composition comprising purified thylakoids and a carrier for oral ingestion or oral administration, with the proviso that the carrier does not essentially consist of water, physiological saline or propylene glycol is also provided as food or a food supplement, or as a pellet, or encapsulated granules or powder. The carrier may be present in an amount of 0.01% to 95% (w/w) of the total composition. The purified thylakoids are present in an amount which achieves a dosage of 0.1 to 10 mg per Kg of a subject's body weight.

WO 2005/027944 A1



- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.